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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/687,634	10/20/2003	Yoshitaka Sasaki	244228US2X	8976
22850	7590	09/20/2005	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			CAO, ALLEN T	
			ART UNIT	PAPER NUMBER
			2652	

DATE MAILED: 09/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/687,634

Applicant(s)

SASAKI ET AL.

Examiner

Allen T. Cao

Art Unit

2652

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) 12-23 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-7,10 and 11 is/are rejected.
- 7) ☒ Claim(s) 3,8 and 9 is/are objected to.
- 8) ☒ Claim(s) 1-23 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 10/20/03 & 9/1/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

1. Applicant's election with traverse of Group I, claims 1-11 in the reply filed on 8/29/05 is acknowledged. The traversal is on the ground(s) that "Although the Office Action has identified separate classifications, Applicants respectfully traverse the Restriction Requirement on the grounds that a search and examination of the entire application would not place a serious burden on the Examiner; whereas it would be a serious burden on Applicants to prosecute and maintain separate applications on the restricted inventions". This is not found persuasive because these inventions are distinct for the reasons given in the last Office Action and have acquired a separate status in the art as shown by their different classification; therefore, the Examiner maintains that the restriction for examination purposes as indicated is proper.

The requirement is still deemed proper and is therefore made FINAL.

2. Claims 12-23 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected claims, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 8/29/05.

3. This application contains claims 12-23 are drawn to an invention nonelected with traverse filed on 8/29/05. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

Art Unit: 2652

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-2, 4-7 and 10-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Sasaki (US. 6,456,459 B1).

Sasaki discloses a thin film magnetic head with a write element (figures 6A, 6B, 12A, 12B), the write element comprising a first yoke portion 8; a first pole portion 11 projecting from a flat surface of the first yoke portion at a medium-facing surface side and having a reduced width at its upper end (figure 12B); a gap film 9; a second pole portion 16 facing the upper end of the first pole portion, having the same width as the upper end of the first pole portion, with the gap film interposed between the second pole portion and the upper end of the first pole portion; a second yoke portion 16b continuous with the second pole portion at the medium-facing surface side and connected to the first yoke portion by a back gap portion 18b that is recessed in the thin film magnetic head from the medium-facing surface; and a coil (12, 14) surrounding in a spiral form the back gap portion on the flat surface of the first yoke portion; wherein, the first pole portion includes a magnetic film 18a (column 12, lines 28-32) adjacent to the gap film, and the magnetic film is etched at both sides in width direction (column 10, lines 13-14) so as to have a narrowed portion having substantially the same width as the second pole portion, and a base portion (figures 12A and 12B) connected to the narrowed portion and increasing in thickness toward the narrowed portion, all as set forth in claims 1 and 6. Sasaki also inherently discloses a magnetic recording/reproducing apparatus (disk drive) having a recording medium as recited in claim 6 (disk drive contains a disc/recording medium).

Regarding claims 2 and 7, Sasaki also discloses that the coil comprises a first coil 12 and a second coil 14; the first and second coils surround in a spiral form (figures 7 and 12A) the back gap portion on a first insulating film 11 formed on the surface of the first yoke portion, and one of the first and second coils is fitted into the space between coil turns of the other, insulated from the coil turns of the other by a second insulating film 13, and the first and second coils are connected to each other (figure 7) so as to generate magnetic flux in the same direction.

Regarding claims 4 and 10, Sasaki discloses that the read element comprises a giant magnetoresistance effect element (column 8, lines 39-40).

Regarding claims 5 and 11, Official Notice has been taken that the giant magnetoresistance effect element comprises one of a spin valve and a ferromagnetic tunnel junction (see Asatani et al (US. 6,445,551 B1), column 1, lines 21-29 and column 6, lines 10-15; Miyazaki et al (US. 6,631,054 B2), column 7, lines 7-19; Asida et al (US. 6,754,052 B2), column 7, lines 29-37; and Kamijima (US. 6,812,543 B2), claim 9).

6. Claims 3 and 8-9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Allen T. Cao whose telephone number is (571) 272-7569. The examiner can normally be reached on Mon - Thurs (7:30 - 6:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa T. Nguyen can be reached on (571) 272-7579. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Allen Cao  
Primary Examiner

AC  
September 9, 2005